DISK SPACE MANAGEMENT (OSA-3)

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DISK SPACE MANAGEMENT

OVERVIEW

This document outlines some of the basic AIX system administration functions for managing disk space on an IBM RS6000 housing the MUNIS financial system. This document deals only with administration of file systems within the AIX operating system. For assistance with MUNIS system administration, see the document entitled *MUNIS System Administration (MSA-1)* in the *MUNIS User Procedures Guide*.

DISK SPACE MANAGEMENT

The AIX administrator will need to constantly monitor disk space and usage. The following command provides information to assist in that task.

Command: df - k

The following is a sample screen to demonstrate the above command:

```
{root@rs6000:/} $df -k
Filesystem    1024-blocks     Free   %Used    Iused   %Iused  Mounted on
/dev/hd4           8192       4552     45%      844      21%   /
/dev/hd2         237568      45640     81%    10421      18%   /usr
/dev/hd9var        8192       7080     14%      146       8%   /var
/dev/hd3          24576      23504      5%       36       1%   /tmp
/dev/hd1          24576       7528     70%      265       5%   /home
/dev/hd11        253952     177724     31%     3520       6%   /fms
```

Notice the two columns - **% Used** and **Free**.

- **% Used** column determines how **full** the particular file system is.

- **Free** column shows **how many 1024 Byte blocks** of free space are available in the particular file system.

- Start monitoring file systems when the **% Used** reaches 85%.

- Prioritize cleanup on file systems when **% Used** is at 95%. (The only exception is the **/usr** file system which will normally run from 80%-97% Used. This is the operating system itself and is automatically managed by the OS.)

- Numerous functions in MUNIS create spool files that take up hard disk space. These files need to be purged on a regular basis. Audit records are also created from many MUNIS functions. These files need to be purged when the audit information is no longer needed by the district. See the document *MUNIS System Administration (MSA-1)* for information about MUNIS spool files. See the document entitled *MUNIS Audit File Administration (MSA-2)* for assistance in managing the MUNIS audit files. Both documents can be found in the *MUNIS User Procedures Guide*.

NOTE: *1024 bytes equals 1 kilobyte (k) of disk space.*

MULTIPLE DISK DRIVES

To list how many drives the IBM RS6000 contains, perform the following steps:

1. At the $ prompt, type:

    smit disk   (Press **Enter**.)

2. Select **List all defined disks.**

/tmp PARTITION

The /tmp partition is used for storage of temporary files created by MUNIS mainly during report generation. Before running a report, ensure that there is enough space allocated for temporary files on your file server. The appropriate size will vary, based on the number of accounts in the MUNIS system. After the process has been completed, MUNIS removes the temporary files, restoring /tmp to its original available space. Check the /tmp partition before running any of the reports listed below:

Annual Financial Report   Monthly Financial Report

Working Budget Report   Tentative Budget Report

Draft Budget Report

To Determine the Appropriate Size for the /tmp Partition, Select:

A) FINANCIALS

    A) General Ledger Menu

        F) Inquiries & Reports Menu

            A) G/L Account Inquiry

1. Select **Find** from the Ring Menu and press **ESC**.

2. Divide the number of displayed accounts by 550, then multiply by 2. This number represents the recommended size, in megabytes, of the /tmp partition for generating the report.

To Determine the Current Size of the /tmp Partition:

1. Login as "**root**".

2. At the $ sign, type **df -k**.

   This produces a listing of all defined partitions with information on each.

   ```
   Filesystem     Total KB    free %used    iused %iused Mounted on
   /dev/hd4           8192    2692   67%      771    37% /
   /dev/hd9var        8192    5468   33%      152     7% /var
   /dev/hd2        1024000  223992   78%    18917     7% /usr
   /dev/hd3          24576   23748    3%       25     0% /tmp
   /dev/hd1           4096    2804   31%      142    13% /home
   /dev/lv00        753664  267044   64%     7762     4% /fms
   ```

3. Locate the /tmp partition in the **Mounted on** column.
4. Check the size of the partition displayed in the **Total KB** column.
5. Divide this amount by 1024 to obtain the number of megabytes allocated to this partition.
6. If the current size of the partition (as calculated in the previous step) is less than the size needed to run the report, increase the space allocated to the /tmp file. It is recommended the partition be increased to a size slightly exceeding that needed for the report (e.g., if the report needs 9 MB set size to 11 MB).

NOTE: **If assistance is required to complete this process, contact the District Technology Coordinator or the KETS Help Desk at 800-461-8977.**